




## ORIGINAL ARTICLE

# Resilience and stress in frontline social workers during the COVID-19 pandemic in Singapore

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## Abstract

As social work under normal circumstances is already a stress-laden helping profession, this study intended to examine the level of psychological distress among the frontline social workers during the COVID-19 pandemic and whether resilience and organizational support played a part in mitigating their psychological distress. Frontline social workers from various social service sectors across Singapore were surveyed using two standardized measurements to assess resilience (Connor-Davidson Resilience Scale 25) and psychological distress (Depression Anxiety and Stress Scale 21). A self-designed questionnaire comprising 10 items measured “personal” and “work-related” support at the organization. Sociodemographic data were captured using a structured questionnaire. The results showed that the frontline social workers, although resilient, were psychologically distressed in all the three areas of depression, anxiety and stress. The results indicated that those working in the Family Service Centers (FSC) were the most affected. Significant correlations were observed between psychological distress, resilience, and organizational support. Organizations must be mindful that support can help frontline staff who are usually younger and less experienced during challenging times such as the pandemic. Building the resilience of social workers will prepare them for their daily challenges and those that accompany unexpected situations.

## KEYWORDS

organizational support, pandemic, psychological distress, resilience, social workers

## 1 | INTRODUCTION

COVID-19 descended upon the world in the early part of 2020. In Singapore, following the emergence of local unlinked cases, the Disease Outbreak Response System Condition (DORSCON), a color-coded framework that reflects the disease situation, was raised from yellow to orange on February 07 (Yong, 2020), indicating the severity of the outbreak that had become worldwide. In the short span of several weeks, Singapore's entire population had to make drastic changes and adaptations to their usual home and work lives. The segregation between work and home blurred as the call then began to work from home except for a handful of essential services. Social work was only deemed as an essential service a few weeks later, with guidelines to adhere to stringent requirements when attending to the clientele.



Social work is a profession with a high risk of burnout and other stress-related hazards (Heisig et al., 2009; Truter et al., 2017) even under normal circumstances. It is inevitable that under more trying conditions, like the current pandemic, social workers, especially those in the frontline, face greater challenges to their psychological health. The nature of providing human services necessitates emotional and empathetic engagement with different groups of people. Frontline social workers who do direct practice were faced with various challenging and difficult situations brought upon by individual clients. Studies have reported that social workers experience higher levels of work-related stress than many other helping professions (Collins, 2008; Johnson et al., 2005). Prolonged exposure to this work-related stress has an impact on these frontline social workers' psychological well-being, which may escalate to chronic stress leading to burnout (Magnavita, Chirico, et al., 2021). Furthermore, it compromises their ability to provide quality services for clients (Coffey et al., 2004; Collins, 2008; Morris, 2005).

It has been reported that providing and maintaining quality service would be more demanding during public crises/emergencies such as the severe acute respiratory syndrome (SARS), H1N1, and COVID-19 pandemics (Imai et al., 2010). At such times, social services, in particular, are much more needed, yet to maintain the function or the quality of services becomes far more challenging due to the lack of resources, reduced perception of organizational justice, and new restrictions imposed in the society. All these can be traumatic for the frontline helping professions (Chan et al., 2013; Magnavita et al., 2020).

After the SARS crisis, various international studies were carried out, in which frontline helping practitioners were asked how they would respond to a hypothesized pandemic situation. Overall, around 20 ~ 40% of respondents in each study showed an unwillingness, concern, or hesitation to work during a future pandemic (Boris et al., 2006; Balicer et al., 2006; Qureshi et al., 2005; Wong et al., 2008). A study conducted in Singapore found that 20% of frontline practitioners had post-traumatic stress disorder (PTSD) two months after the SARS outbreak (Chan & Chan, 2004). However, little is known about the work-related stress experienced by social workers who are frontline responders to the most vulnerable people in society during a national crisis.

Studies carried out during the recent COVID-19 pandemic on healthcare workers have reported psychological distress in the sample (Chew et al., 2020; Teo et al., 2020). Given the high level of work-related stress experienced among helping professionals, it is important to understand better how they could cope with this stress. It is known that resilience is a coping strategy to manage work-related stress among helping professionals (Vinkers et al., 2020). For instance, hardiness, an individual trait related to resilience, was negatively associated with stress among Italian healthcare and emergency workers during the COVID-19 pandemic (Vagni et al., 2020). Resilience is a capacity to cope with stressful events related to work or life and learn and grow from these untoward experiences. It is defined as "the general capacity for flexible and resourceful adaptation to external and internal stressors" (Klohn, 1996, p. 1068) and the "ability to bounce back or recover from stress" (Smith et al., 2008). In the context of this study, using a multidimensional model, resilience is operationally defined as "the sustained adaptive effort that prevails despite challenges, meaning the ability to resist adversity and recover to learn and grow with knowledge and new skills" (Kent et al., 2014).

Through a thematic content analysis on the personal definitions of resilience among 200 social work students and 100 experienced social workers in England, Grant and Kinman (2013a) observed that experienced social workers perceived resilience with more complexity as compared to social work students. Students expressed resilience as a reactive mechanism, whereas experienced social workers referred to resilience as both reactive and proactive aspects of coping. Further, while students cited personal strengths as sources of resilience, social workers highlighted the interaction between personal attributes and a protective environment. A study conducted by Howard (2008) showed that resilience might buffer the negative impact of work-related stress, especially in a challenging working environment. In their study of 240 trainee social workers, Kinman and Grant (2011) noted a negative relationship between resilience and psychological distress and that resilience could be bolstered by emotional and social competencies.

Besides these individual factors, studies have addressed that work-based resilience is important for frontline social workers to cope with their psychological distress arising from various demanding situations (Collins, 2008; Morrison, 2007). Following a qualitative study of three newly qualified social workers in statutory children's service, Kearns and McArdle (2012) identified the following as sources of resilience: "Positive role models, trust, 'managed' optimism, the flexibility of support in and beyond induction, and, crucially, self-efficacy and space for reflexivity" (p. 385). Additionally, the respondents shared that organizational factors such as a culture of trust within teams and the wider organization may promote sustainability in relation to turnover. In relation to organizational factors, research has suggested that organizational support—like relevant training, workplace culture, and certain work-based demographic variables—helps reduce the pressure of work demands and enhances resilience in professionals in healthcare settings (Sull et al., 2015).

However, despite its relevance as a potential resource for protecting social workers' psychological well-being against work-related challenges and stress they face, the extent to which environmental or individual factors enhance resilience has not been much examined. In particular, little is known about organizational or other support that promotes resilience in Singapore's frontline social workers.

Hence, this exploratory research examines the psychological distress of frontline social workers and their resilience during the pandemic. It also explores the association between psychological distress and resilience as well as the role of organizational support and other demographic variables that mitigate psychological distress.

## 2 | METHODS

### 2.1 | Research design

The study was conducted in English via an online survey using google form. The online survey was circulated to social work practitioners mainly by the various restructured hospitals and the Singapore Association of Social Workers (SASW). To complete the survey, participants had to (a) be a qualified social worker; (b) be involved in any forms of direct practice in social services agencies or hospitals in Singapore; and (c) be working in the social service sectors for more than 6 months.

### 2.2 | Instruments

The questionnaire was divided into three subsections as follows: (a) a self-designated questionnaire that captured demographic data (b) standardized measurements to assess resilience and psychological distress, and (c) a self-designed questionnaire which comprised 10 items concerning "personal" and "work-related" support at the organizations.

#### 2.2.1 | Connor-Davidson resilience scale (CD-RISC-25)

The CD-RISC-25 (Davidson, 2020) is a 25-item self-rating scale for assessing the respondent's level of resilience. Resilience in this scale is operationalized as a complex construct which comprises several components: personal competence and tenacity, tolerance of negative affect, the strengthening effects of stress, positive acceptance of change, secure relationships, control, and spiritual influences (Arias González et al., 2015). Respondents were advised to respond to each item with reference to the previous month; if the event had not occurred, they were asked to respond according to how they thought their reaction would be if such an event had occurred. Each item is scored from 0 to 4. The scoring of the scale is based on summing all 25 items. Thus, the total score may range between 0 and 100; higher scores would suggest higher resilience. Cronbach  $\alpha$  of the CD-RISC-25 in this study was .930.

#### 2.2.2 | Depression anxiety stress scale (DASS-21)

The DASS-21 was used to screen for depression, anxiety, and stress among the participants. It is a validated screening instrument for use among the general population (Chew et al., 2020) and comprises a total of 21 items, seven items for each of the three psychological distress components. The scores for each component are summed and multiplied by two. The instrument provides cutoff scores on the level of severity for each component. The cutoff scores of  $>9$ ,  $>7$ , and  $>14$  represent a positive screen of depression, anxiety and stress, respectively. Cronbach  $\alpha$  of each component in this study was .907 (Depression), .837 (Anxiety), and .874 (Stress).

#### 2.2.3 | Scale on organizational support

The scale comprises 10 items pertaining to "personal" and "work-related" support by the organization. Items 1 to 7 are scored on a Likert scale, and each item is scored from 1 to 5. Item 8 is an open-ended question ("In general, do you think that support would be useful in helping you manage the situation?"), and participants were given the option of "yes" or "no." Cronbach  $\alpha$  in this study was .711.

### 2.3 | Statistical analysis

Descriptive statistics were used for demographics (Table 1). One-way analysis of variance (ANOVA) and *t* tests were carried out to assess group differences in the scores of depression, anxiety, stress, resilience, and organizational support across sociodemographic variables. Correlation and linear regression were employed to examine the association between resilience, psychological distress, and organizational support. For the linear regression model, categorical demographic variables were converted into dummy variables to control their effect on dependent variables (anxiety, depression, and stress). A *p*-value of  $<.05$  was deemed significant for this study. The SPSS Statistics 26 for Windows was used for statistical analysis.

TABLE 1 Sociodemographic characteristics of the survey sample

Sociodemographic variables	Category	n (308)	%
Gender	Female	228	74
	Male	80	26
Age (in years)	21–29	159	51.6
	30–39	94	30.5
	40–49	38	12.3
	50–59	13	4.2
	60 and above	4	1.3
Ethnicity	Chinese	256	83.1
	Malay	24	7.8
	Indian	25	8.1
	Others	3	1
Registered social worker	Yes	172	55.8
	No	136	44.2
Years of working in the social service sectors	Less than 1 year	13	4.2
	Between 1 to 3 years	102	33.1
	More than 3 to 6 years	89	28.9
	More than 6 to 10 years	51	16.6
	More than 10 years	53	17.2
Social Service Setting	Family Service Centre	121	39.3
	Hospital/Healthcare setting	102	33.1
	Other Social Service Agency	85	27.6
Years of working in current organization	Less than 1 year	59	19.2
	1 ~ 3 years	141	45.8
	4 ~ 6 years	59	19.2
	7 ~ 10 years	30	9.7
	More than 10 years	19	6.2
Living with family	Yes	272	88.3
	(living with vulnerable family member)	(182)	(59.1)
	No	36	11.7
Professional position	Social work associate	37	12
	Social worker I <sup>a</sup>	129	41.9
	Social worker II <sup>b</sup>	58	18.8
	Senior social worker	46	14.9
	Lead social worker	16	5.2
	Master social worker	2	0.6
	Senior master social worker	0	0

<sup>a</sup>social worker I: to assess and follow up on case referrals, assist in interventions, group work, development, and implementation of programs (NCSS, 2015, p9).

<sup>b</sup>social worker II: to manage complex cases and organize group work or development program (NCSS, 2015, p9).

### 3 | RESULTS

The online survey was completed by 308 professionals in Singapore's social service landscape between June 19 and June 27, 2020. An overwhelming majority (83.1%) were Chinese. More than half of the respondents (59.1%) were living with a family member in the vulnerable group (people who are older than 60 years or who have health conditions like lung or heart disease, diabetes or other chronic medical conditions) (World Health Organisation, 2020).

**TABLE 2** Correlation between Resilience, Organizational Support, and Psychological Distress in the sample (N = 308)

	M (SD)	Resilience	Depression	Anxiety	Stress	Org Support
Resilience	68.15 (12.43)	1				
Depression	10.16 (8.98)	-.469**	1			
Anxiety	9.90 (8.19)	-.261**	.718**	1		
Stress	13.60 (8.73)	-.335**	.761**	.749**	1	
Organizational Support	25.99 (4.11)	.199**	-.361**	.2212.297**	-.400**	1

Note: \*\*<.001.

About two-thirds of the participants had worked in the social service sector for more than three years (62.7%). In terms of social service settings, they were practicing in Family Service Centers (39.3%), Hospitals and Healthcare Agencies (33.1%), and in Other Social Service Agencies (27.6%). The majority had been working at their current organization for between 1 to 3 years (45.8%). With regard to their professional position in their current organization, the top three categorizations were as follows: Social Worker I (assess and follow up on case referrals, assist in interventions, group work, development, and implementation of programs) (NCSS, 2015, p9) (41.9%), Social Worker II (manage complex cases and organize group work or development program) (NCSS, 2015, p9) (18.8%), and Senior Social Worker (14.9%). More than half of them were registered social workers (55.8%) (Refer to Table 1).

### 3.1 | Psychological distress (depression, anxiety and stress), resilience, and organizational support

The results indicated a correlation between each major variable (anxiety, depression, stress, resilience, and organizational support) as predicted. Resilience was significantly and negatively correlated with depression, anxiety, and stress. Organizational support was also negatively correlated with anxiety, depression, and stress ( $p < .001$ ). Resilience was positively correlated with organizational support ( $p < .001$ ) (Refer to Table 2).

On comparing the participants' depression, anxiety, and stress scores across the groups, anxiety and depression were significantly different by age, social service sectors, working experiences, and professional registration. Post hoc test found that those working in the FSC showed significantly higher depression than those who worked at social services agencies ( $F(2,305) = 4.32, p = .014$ ). Higher anxiety was seen in those with 3 or fewer years of practice as compared to those with more experience, that is, six years and more of practice,  $F(2, 305) = 4.35, p = 0.14$ . Higher anxiety was also found in social workers aged between 21 and 29 compared with those aged 30 to 39,  $F(2, 305) = 8.27, p < .001$ . On comparing the registered with the non-registered social workers, registered social workers had lower anxiety and depression scores ( $p < .05$ ) (Refer to Table 3).

Linear regression showed that the effect of organizational support was significantly and negatively associated with psychological distress: Depression ( $\beta = -.366, p < .001$ ), Anxiety ( $\beta = -.302, p < .001$ ), and Stress ( $\beta = -.404, p < .001$ ). The effect of organizational support was significantly and positively associated with resilience ( $\beta = .212, p < .001$ ) (Refer to Table 4). The effect of resilience was significantly and negatively associated with psychological distress: Depression ( $\beta = -.430, p < .001$ ), Anxiety ( $\beta = -.238, p < .001$ ), and Stress ( $\beta = -.323, p < .001$ ) (Refer to Table 5).

Additionally, adopting the cutoff scores of the DASS-21 scoring system to screen the level of severity for depression, anxiety, and stress, this study found that a considerably high percentage of social workers met the criteria for depression, anxiety, and stress at 45.8%, 56.5%, and 38.3%, respectively (Refer to Table 6).

## 4 | DISCUSSION

Social work is a profession with a high risk for burnout and other stress-related health hazards (Heisig et al., 2009; Truter et al., 2017). The results of our study and others suggest that resilience and organizational support would work as protective factors to mitigate frontline social worker's psychological distress during the COVID-19 pandemic. Building resilience in the social workers can prevent burnout and sustain professional preservation.

Our study found a considerably high percentage of social workers who met the criteria for depression, anxiety, and stress. More than half of the frontline social workers surveyed (56.5%) had mild to severe anxiety. These percentages were higher compared with other studies on

TABLE 3 Major variables' (anxiety, depression, stress, resilience, and organizational support) scores of frontline social workers by group characteristics (N = 308)

Overall	N (%) 308(100)	Anxiety		Depression		Stress		Resilience		Organizational Support	
		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)	
Age											
21-29	159(51.6)	11.6(8.6)		11.8(9.3)		14.7(9.2)		66.2(12.7)		26.4(3.7)	
30-39	94(30.5)	7.5(5.6)		8.7(7.9)		12.5(7.7)		68.7(11.8)		25.9(4.3)	
40 above	55(17.9)	9.0(9.5)		8.0(8.9)		12.1(8.8)		72.7(11.6)		25.2(4.7)	
Social Service Sector											
FSC	121(39.3)	11.3(8.6)		11.3(9.8)		14.8(9.4)		68.3(12.5)		25.6(4.3)	
Healthcare	102(33.1)	8.9(8.0)		10.8(9.5)		13.0(8.6)		66.2(12.0)		25.9(3.7)	
SSA	85(27.6)	9.1(7.6)		7.8(6.4)		12.7(7.4)		70.2(12.5)		26.3(4.3)	
Year of working											
Less than 3	115(37.3)	11.4(9.0)		11.5(9.6)		14.3(9.1)		66.6(12.8)		26.2(3.6)	
3-6	89(28.9)	9.9(7.2)		10.1(8.6)		14.0(8.7)		67.8(11.6)		26.1(4.0)	
More than 6	104(33.8)	8.2(7.8)		8.6(8.5)		12.4(8.3)		70.2(12.5)		25.7(4.7)	
Year of working at current agency											
Less than 1	59(19.2)	12.0(9.9)		10.8(9.3)		14.8(9.0)		69.8(13.1)		25.6(3.7)	
1 ~ 3	141(45.8)	10.4(8.0)		10.7(9.5)		13.9(8.8)		66.9(12.6)		26.0(4.1)	
More than 4	108(35.0)	8.5(7.2)		9.1(8.1)		12.5(8.5)		68.8(12.1)		26.2(4.4)	
Registration											
Registered	172(44.8)	8.8(7.4)		8.7(7.8)		12.4(8.4)		69.5(12.7)		26.3(4.2)	
Non-Registered	136(44.2)	11.3(8.9)		12.1(9.9)		15.1(8.9)		66.5(11.9)		25.6(3.9)	

Note: statistically significant results (<.05) are bold. Independent t test conducted for registered and non-registered social workers. Analysis of variance used for age, social service sectors, year of working at social service sectors, and year of working at current agency.

TABLE 4 Effect of organizational support (OS) on psychological distress and resilience (N = 308)

Effect <sup>a</sup> , Variables	R <sup>2</sup>	F	$\beta$	p
Depression	.243	6.178	-.366	.000
Anxiety	.182	4.665	-.302	.000
Stress	.209	5.542	-.404	.000
Resilience	.138	3.347	.212	.000

<sup>a</sup>adjusted for age, years of working, sectors, and registration

TABLE 5 Effect of resilience on psychological distress (N = 308)

Effect <sup>a</sup> , Variables	R <sup>2</sup>	F	$\beta$	p
Depression	.281	8.179	-.430	.000
Anxiety	.146	3.568	-.238	.000
Stress	.146	3.580	-.323	.000

<sup>a</sup>adjusted for age, years of working, sectors, and registration

TABLE 6 Level of severity of Depression, Anxiety, and Stress (N = 308)

Level of severity	1 (normal)	2 (mild)	3 (moderate)	4 (severe)	5 (extremely severe)
Depression	167 (54.2%)	38 (12.3%)	63 (20.5%)	22 (7.1%)	18 (5.8%)
Anxiety	134 (43.5%)	36 (11.7%)	68 (22.1%)	30 (9.7%)	40 (13.0%)
Stress	190 (61.7%)	41 (13.3%)	40 (13.0%)	29 (9.4%)	8 (2.6%)

healthcare workers in Singapore during the same period (Chew et al., 2020; Tan et al., 2020), healthcare workers in India (Chew et al., 2020), and the general population in China (Wang et al., 2020).

Working from home comes with a range of daily stresses, also known as “hassles,” which, according to Lazarus and Folkman (1984) if accumulated, could be even more detrimental than a major life event. They inevitably add to the stress of these frontline social workers when trying to manage their clients online while having to deal with the hassles of working from home. It is common for these young and less experienced social workers to consult each other at work, and they are dependent on one another for support. Working at home may lead to working in isolation, inevitably denying them of the readily available help and consultation from colleagues and seniors (Awang, 2020). The notion that one must be available at all times to meet the intrusive leadership style of supervisors may inevitably lead to prolonged hours of work (Magnavita, Tripepi, et al., 2021). Fear of the unknown, fear of the disease, and the lack of information could also have contributed to the high anxiety (Wang et al., 2020) as a majority of them (59.1%) in this study had vulnerable family members in their households who were of concern. Technology may be helpful and useful if the infrastructure, like networks and equipment like computers, are readily available. Physical space and a conducive work environment also play a role. A lack in any of these areas in the home setting can lead to additional stress, unlike in the office setting when they are mostly available (Awang, 2020).

Of interest is that the frontline social workers at the FSCs fared worse than those at the hospital and other social service agencies. The possible explanations are that the healthcare sector was generally more prepared for such a crisis, having experienced the SARS outbreak and the H1N1 pandemic in the earlier years. This sector had the advantage of being at the forefront of health-related information. Being in the know is a great advantage, while lack of information causes undue anxiety (Wray et al., 2008; Du et al., 2020). The healthcare sector also received a lot of public support during this period. Public accolades and encouragement are a great boost to healthcare workers' morale, and no doubt contributed to their well-being (Ornell et al., 2020; World Health Organisation, 2020).

Organizational support, which is a relatively new concept, appeared to have a mitigating effect on the psychological distress of these workers (Sull et al., 2015). Our findings indicate that organizational support helps to ease psychological distress. The idea that the organization cares and is available for consultation and support is a great help to these social workers. Providing even little incentives goes a long way to boost the staff's morale and make the challenging work more manageable. However, Magnavita et al. (2020) also pointed out that the perception of organizational injustice seen in the imbalance of high effort and low rewards resulting in organizational stress could be seen to negate organizational support. Besides support, social workers in some qualitative responses quoted the implementation of administrative requirements like audit and meeting key performance indicators as sources of anxiety. Some also cited a lack of resources and feeling isolated. On a positive note, supportive supervisors and peer support were cited as beneficial by them.





Equipping social work practitioners with skills for self-care and stress prevention is important for their long-term psychological well-being. This study showed that the resilience levels of social workers in Singapore were higher compared with their counterparts in Asian countries like China (Yu et al., 2009), Hong Kong (Ni et al., 2015) and Korea (Ha et al., 2009). We also noted that resilience could mitigate psychological distress. Developing resilience in the social workers, especially in the vulnerable group in this study, namely the younger and less experienced, would prepare them to better manage their psychological distress under trying conditions. Grant and Kinman (2013b, 2014) postulated that resilience could be developed or enhanced over time under the right circumstances through education. Methods for teaching resilience include problem-based learning (Stoffel & Cain, 2018), peer activities, reflective practice, directed study, inquiry-based learning, and experiential learning (Walsh et al., 2020). On the work front, Maslach and Leiter (2017) advocated for improving the job-person fit, which alleviates burnout. Ensuring a good job fit translates to supervisors assigning the social workers to the clients who match their competency levels and an optimal caseload. Creating more effective agency models for the new and inexperienced social workers to include more structured and closer supervision, peer support, and relevant training will undoubtedly improve resilience and increase staff retention. Effective supervision has been shown to influence professional self-esteem, empowerment to practice, and problem-solving even under adverse conditions (Lee et al., 2011). There is also a need to lessen organizational bureaucracy, improve civility in the workplace, enhance teamwork, and build a culture of appreciation, all of which enhance resilience.

Some of the limitations of this study are that a convenient sampling was used even though it was an inclusive one with representation from all the sectors. Thus, the results are not generalizable to the social work population across the whole of Singapore. In addition, it is a cross-sectional study, so it was not able to determine if there was an increase in the distress level following the pandemic or if it was a distressed population to begin with. There could be a respondent bias in some areas where the questionnaire was distributed through the agency head. The last limitation would be that our organizational support instrument has not been validated. However, the results appear to point to the reliability of the instrument.

## 5 | CONCLUSION

This study points to the challenges of new social workers assigned to frontline work during the current COVID-19 pandemic. Their high levels of psychological distress may have been brought about by several factors like their lack of experience and adapting to a new working style (working from home) that promotes isolation and possibly anxiety about the disease and its consequences. Mitigating factors like resilience and the availability of organizational support play a part in ameliorating their psychological distress.

The implications of our study include the need for organizations to pay attention to the psychological health of the staff under such circumstances. Organizations must be mindful of the support that can help these frontline staff, who are usually younger and less experienced. Looking ahead, building up the resilience of social workers will also prepare them for not only their daily challenges but those that accompany unexpected situations. Resilience will certainly improve their functioning in normal and untoward circumstances (Kearns & McArdle, 2012). Social workers care for and are concerned about the clients they serve. Who will care for these social workers?

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